SUBMISSION TO THE HOUSE OF COMMONS STANDING COMMITTEE ON RESEARCH, SCIENCE AND TECHNOLOGY

From
the Association of Universities
and Colleges of Canada

REGARDING THE PROPOSED CENTRES OF EXCELLENCE PROGRAM

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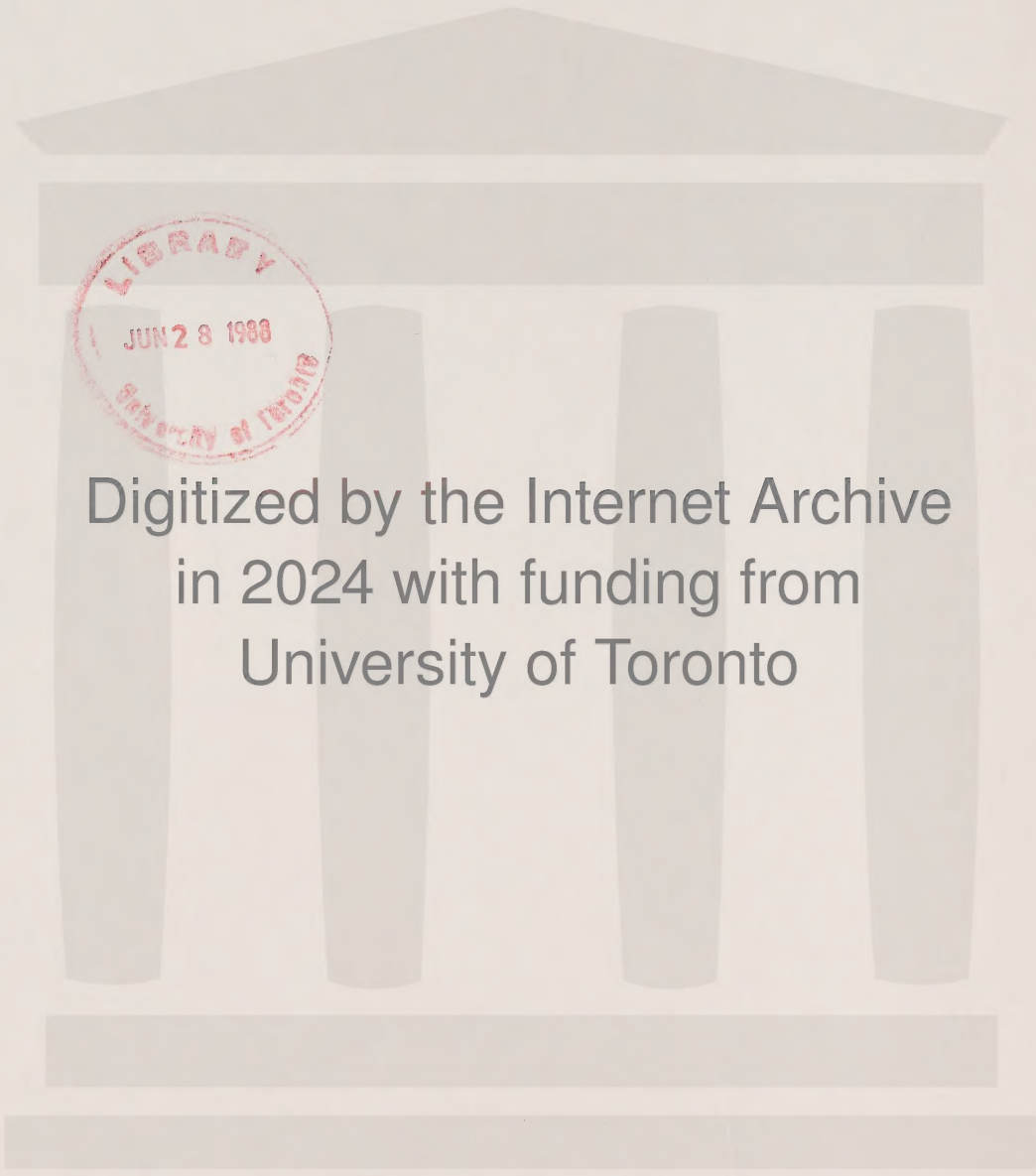

INTRODUCTION

The Association of Universities and Colleges of Canada (AUCC) welcomes this opportunity to share its views on the proposed Centres of Excellence Program, announced by the Prime Minister last January. This special funding program is an important initiative designed to capitalize on the existing research capabilities of Canadian universities. The Centres Program does not, however, address the central funding problem in university-based research.

ROLE OF UNIVERSITY RESEARCH

The primary role and the distinctive advantage of universities as centres of research rest in the training of Canada's highly qualified human resources at the frontier of knowledge and in the conduct of long term research yielding systematic advancement in knowledge. These functions constitute the essential core of the university research mission.

The university research mission has, in recent years, been broadened to include important ancillary objectives, namely, the enhancement of knowledge diffusion and technology transfer in order to enhance economic development.

Recent increases in the frequency and diversity of interaction with the private sector indicate the willingness of universities to adapt to changing needs. Through consulting activities, systematic exchanges and the performance of applications-oriented research, universities are assuming an expanding role in Canada's science and technology enterprise.

An appreciation of the link between the primary role of university research and its secondary roles is of paramount importance. Unless universities are able to perform their primary role of frontier research and training at an appropriate scale and level of sophistication, their ability to sustain their secondary roles in knowledge diffusion and technology transfer will be compromised also.

FEDERAL FUNDING OF UNIVERSITY RESEARCH

The increased involvement of the private sector in R&D during the past decade has lead to a major shift among the different sectors that compose Canada's R&D system. The modest strengthening of the country's weak R&D effort has occurred mainly in the private sector. The relative share of total R&D performed in universities has fallen from 31% to approximately 25% since 1977 and support for basic research in universities has declined in real terms. University research remains largely dependent on public funding, and particularly on federal support provided through the granting councils. This reliance on public support is not an anomaly. Due to the "public good" dimension of university research, it is entirely appropriate to consider funding of university research as a public sector responsibility. Private support may provide an additional source of funding. It cannot, however, replace public funding of the essential core of university-based research.

The funding of the granting councils is an important indicator of the federal contribution to the primary research function of universities. Measured as a percentage of GDP, the total budgets of the granting councils have fallen by 5% annually since 1984. We estimate that in 1987 alone an additional $97 million would have been required to compensate for the relative decrease in the contribution of the councils' budgets as a percentage of GDP. The cumulative shortfall in council funding since 1984 is in the order of $180 million. The current resources available to the granting councils severely constrain their ability to nurture significant research capabilities. Considering the current cost of research and the poor state of research equipment, researchers must compensate for limited council funding with a great deal of ingenuity. Unfortunately, the lack of research support also constrains researchers to opt for the caution of traditional research questions rather than the boldness and vision of which they are capable.

Considerations such as these have lead the University Committee of the National Advisory Board for Science and Technology to recommend that the government double the budgets of the granting councils over the next three years, and that their budgets subsequently grow at an annual rate of 1.5 times GNP growth. The AUCC fully endorses these recommendations and

recommends that the Standing Committee urge the government to use a large part of its $1.3 billion commitment to science and technology to implement this recommendation.

CENTRES OF EXCELLENCE PROGRAM

The preceding review of the role and funding of university research leads to an inescapable conclusion: the Centres of Excellence Program is not a panacea or a substitute for a vigorous policy of support of university research. The success of a special funding program such as the Centres Program depends on the existence of an essential core of research excellence on which to capitalize. This core is built by years of stable support at an adequate level.

The Centres program must also be placed in its proper perspective. The projected $40-60 million to be allocated annually to this program over the next five years is unquestionably an important initiative in the current climate of fiscal restraint. However, this amount represents some 3% of current total R&D expenditures in universities. The size of the commitment should therefore not be exaggerated. On the contrary, it underlines the need to allocate the funds wisely, in order to ensure their full impact in terms of enhancing our research strengths. The decision to have the granting councils administer this program bodes well in this respect. The AUCC wholeheartedly endorses this decision.

i) Eligibility:

It is our understanding that all forms and types of proposals will be admissible provided they can show the potential of achieving the dual objectives of contributing (a) to the advancement of scientific and engineering research in Canada and (b) to Canada's long term economic competitiveness. We entirely concur with the need to ensure that the program be as flexible as possible by avoiding limiting criteria in terms of disciplines, fields of study or areas of concentration.

ii) Assessment criteria:

The AUCC supports the need to submit the proposals to rigorous peer assessment. This is critical to ensure the credibility of the program. We therefore recommend that the quality of the projects and of the researchers as

judged by peers be the paramount consideration. To the extent that the Centres Program is designed to capitalize on our research strengths and to serve the long term research needs of Canada, the assessment of proposals should be limited to the consideration of the factors that foster and constitute excellence in research. In order to ensure this, the AUCC recommends that the granting councils assume responsibility for specifying the assessment criteria and for determining the relative weight of each.

iii) Admissible costs:

The granting councils have traditionally covered only the direct costs of the research they sponsor, leaving the universities to assume the indirect and overhead costs. It is widely recognized that each grant dollar coming into a university taxes the institution's operating budget by an equivalent amount.

The AUCC believes that the centres should be self-supporting enterprises as much as possible. At a minimum, we would urge that the definition of direct costs be broad enough to include all costs specifically related to the projects, that is, secretarial services, technical support, equipment needs, shared services, maintenance and service contracts on major items of equipment.

iv) A five year program or a five year commitment:

Concerns have been expressed with respect to the absence of any long term commitment to the Centres of Excellence Program. In the absence of a long term commitment by the government, the research community, and in particular the prospective centres, face the prospect of seeing this program terminated after five years. Five years represent a short period for a research program. Moreover, new fields, with unforeseen potential for Canada's long term competitiveness, are emerging ever more rapidly.

The AUCC therefore recommends that the government avoid a "boom and bust" approach to research funding by indicating now its readiness to commit itself to the long term funding of the Centres Program.

CONCLUSION

The Centres of Excellence Program is intended to promote both science and engineering research and the country's long term economic competitiveness.

The Centres Program addresses only one aspect of the enhanced support for university research recommended by the University Committee of the National Advisory Board on Science and Technology. The program must be seen in the context of a fundamental imperative in a national science policy, namely, the need to provide for steady growth in the basic research capacity of Canada's universities. This capacity is, after all, the foundation for training the future generations of scientists and engineers who will form Canada's centres of excellence of tomorrow.

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